## Appendix A

#### Claim Amendments

1. (Currently amended) A compound of the formula 1

in which

R1 is hydrogen, 1-4C-alkyl, 3-7C-cycloalkyl, 1-4C-alkoxy-1-4C-alkyl or 1-4C-alkoxycarbonyl,

R2 is hydrogen, 1-4C-alkyl, halogen, 2-4C-alkenyl, 2-4C-alkynyl, hydroxy-1-4C-alkyl, 3-7C-cycloalkyl, 1-4C-alkoxycarbonyl,

R3 is hydroxy-1-2C-alkyl, 1-4C-alkoxy-1-2C-alkyl, 1-4C-alkoxy-1-4C-alkoxy-1-2C-alkyl, 1-4-C-alkoxycarbonyl or the radical -CO-NR31R32,

where

R31 is hydrogen, 1-7C-alkyl, hydroxy-1-4C-alkyl or 1-4C-alkyl and

R32 is hydrogen, 1-7C-alkyl, hydroxy-1-4C-alkyl or 1-4C-alkyl,

or where

R31 and R32 together and including the nitrogen atom to which they are attached are a pyrrolidino, piperidino, or morpholino radical,

Arom is a R4-, R5-, R6- and R7- substituted mono- or bicyclic aromatic radical selected from the group consisting of phenyl, naphthyl, pyrrolyl, pyrazolyl, imidazolyl, 1,2,3-triazolyl, indolyl, benzimidazolyl, furanyl (furyl), benzofuranyl (benzofuryl), thiophenyl (thienyl), benzothiophenyl (benzothienyl), thiazolyl, isoxazolyl, pyridinyl, pyrimidinyl, quinolinyl and isoquinolinyl,

#### where

R4 is hydrogen, 1-4C-alkyl, hydroxy-1-4C-alkyl, 1-4C-alkoxy, carboxyl, 1-4C-alkoxycarbonyl, carboxy-1-4C-alkyl, 1-4C-alkoxycarbonyl-1-4C-alkyl, halogen, hydroxyl, aryl, aryl-1-4C-alkyl, aryloxy, aryl-1-4C-alkoxy, trifluoromethyl, nitro, amino, mono- or di-1-4C-alkylamino, 1-4C-alkylcarbonylamino, 1-4C-alkoxy-1-4C-alkoxycarbonylamino, 1-4C-alkoxy-1-4C-alkoxycarbonylamino or sulfonyl,

R5 is hydrogen, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonyl, halogen, trifluoromethyl or hydroxyl,
R6 is hydrogen, 1-4C-alkyl or halogen and

R7 is hydrogen, 1-4C-alkyl or halogen, where

aryl is phenyl or substituted phenyl having one, two or three identical or different substituents selected from the group consisting of 1-4C-alkyl, 1-4C-alkoxy, carboxyl, 1-4C-alkoxycarbonyl, halogen, trifluoromethyl, nitro, trifluoromethoxy, hydroxyl and cyano,

## or a salt thereof

and its salts.

- 2. (Currently amended) A compound of the formula 1 as claimed in claim 1, in which
- R1 is 1-4C-alkyl or 3-7C-cycloalkyl,
- R2 is 1-4C-alkyl, halogen, hydroxy-1-4C-alkyl, 2-4C-alkenyl or 3-7C-cycloalkyl,
- R3 is hydroxy-1-2C-alkyl, 1-4C-alkoxy-1-2C-alkyl, 1-4C-alkoxy-1-4C-alkoxy-1-2C-alkyl, 1-4-C-alkoxycarbonyl or the radical -CO-NR31R32,

where

R31 is hydrogen, 1-7C-alkyl, hydroxy-1-4C-alkyl or 1-4C-alkyl and

R32 is hydrogen, 1-7C-alkyl, hydroxy-1-4C-alkyl or 1-4C-alkyl, alkoxy-1-4C-alkyl,

or where

R31 and R32 together and including the nitrogen atom to which they are attached are a pyrrolidino, piperidino, or morpholino radical,

Arom is a R4-, R5-, R6- and R7- substituted mono- or bicyclic aromatic radical selected from the group consisting of phenyl, naphthyl, pyrrolyl, pyrazolyl, imidazolyl, 1,2,3-triazolyl, indolyl, benzimidazolyl, furanyl (furyl), benzofuranyl (benzofuryl), thiophenyl (thienyl), benzothiophenyl (benzothienyl), thiazolyl, isoxazolyl, pyridinyl, pyrimidinyl, quinolinyl and isoquinolinyl,

where

R4 is hydrogen, 1-4C-alkyl, hydroxy-1-4C-alkyl, 1-4C-alkoxy, carboxyl, 1-4C-alkoxycarbonyl, carboxy-1-4C-alkyl, 1-4C-alkoxycarbonyl-1-4C-alkyl, halogen, hydroxyl, aryl, aryl-1-4C-alkyl, aryloxy, aryl-1-4C-alkoxy, trifluoromethyl, nitro, amino, mono- or di-1-4C-alkylamino, 1-4C-alkylcarbonylamino, 1-4C-alkoxy-1-4C-alkoxycarbonylamino, 1-4C-alkoxy-1-4C-alkoxycarbonylamino or sulfonyl,

- R5 is hydrogen, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxycarbonyl, halogen, trifluoromethyl or hydroxyl,
  R6 is hydrogen, 1-4C-alkyl or halogen and
  R7 is hydrogen, 1-4C-alkyl or halogen,
  where
- aryl is phenyl or substituted phenyl having one, two or three identical or different substituents selected from the group consisting of 1-4C-alkyl, 1-4C-alkoxy, carboxyl, 1-4C-alkoxycarbonyl, halogen, trifluoromethyl, nitro, trifluoromethoxy, hydroxyl and cyano,

## or a salt thereof

- 3. (Currently amended) A compound of the formula 1 as claimed in claim 1, in which
- R1 is 1-4C-alkyl,
- R2 is 1-4C-alkyl, halogen, hydroxy-1-4C-alkyl or 2-4C-alkenyl,
- R3 is hydroxy-1-2C-alkyl, 1-4C-alkoxy-1-2C-alkyl, 1-4C-alkoxy-1-4C-alkoxy-1-2C-alkyl or the radical -CO-NR31R32,

where

R31 is hydrogen, 1-7C-alkyl,

R32 is hydrogen, 1-7C-alkyl,

or where

R31 and R32 together and including the nitrogen atom to which they are attached are a pyrrolidino, piperidino, or morpholino radical,

Arom is a R4- and R5- substituted phenyl, furanyl (furyl), thiophenyl (thienyl), pyrrolyl or pyridinyl, where

R4 is hydrogen, 1-4C-alkyl, hydroxy-1-4C-alkyl, 1-4C-alkoxy, halogen or hydroxyl,

R5 is hydrogen, 1-4C-alkyl, 1-4C-alkoxy, halogen or hydroxyl,

## or a salt thereof

and its salts.

4. (Currently amended) A compound of the formula 1 as claimed in claim 1, in which

R1 is 1-4C-alkyl,

R2 is 1-4C-alkyl, halogen, hydroxyl-1-4C-alkyl or 2-4C-alkenyl,

R3 is hydroxy-1-2C-alkyl, 1-4C-alkoxy-1-2C-alkyl, 1-4C-alkoxy-1-4C-alkoxy-1-2C-alkyl or the radical -CO-NR31R32,

where

R31 is hydrogen or 1-7C-alkyl,

R32 is hydrogen or 1-7C-alkyl,

or where

R31 and R32 together and including the nitrogen atom to which they are attached are a pyrrolidino, piperidino, or morpholino radical,

Arom is a R4- and R5- substituted phenyl, furanyl (furyl), thiophenyl (thienyl), pyrrolyl or pyridinyl,

where

R4 is hydrogen, 1-4C-alkyl, hydroxy-1-4C-alkyl, 1-4C-alkoxy, halogen or hydroxyl,

R5 is hydrogen, 1-4C-alkyl, 1-4C-alkoxy, halogen or hydroxyl,

or a salt thereof

5. (Currently amended) A compound of the formula 1 as claimed in claim 1, in which

R1 is 1-4C-alkyl,

R2 is 1-4C-alkyl, halogen or hydroxy-1-4C-alkyl,

R3 is 1-4C-alkoxy-1-2C-alkyl or the radical -CO-NR31R32, where

R31 is hydrogen or 1-7C-alkyl,

R32 is hydrogen or 1-7C-alkyl,

or wherein

R31 and R32 together and including the nitrogen atom to which they are attached are a pyrrolidino radical,

Arom is a R4 substituted phenyl or thiophenyl (thienyl), where

R4 is hydrogen, 1-4C-alkyl or halogen,

## or a salt thereof

and its salts.

6. (Currently amended) A compound of the formula 1 as claimed in claim 1, in which

R1 is 1-4C-alkyl,

R2 is 1-4C-alkyl,

R3 is the radical -CO-NR31R32,

where

R31 is hydrogen or 1-7C-alkyl,

R32 is hydrogen or 1-7C-alkyl,

Arom is phenyl,

# or a salt thereof

- 7. (Currently amended) The compound (9S)-2,3-Dimethyl-9-phenyl-7H-8,9-dihydro-pyrano[2,3-c]-imidazo[1,2-a]pyridine-6-carboxylic acid dimethylamide or a salt thereof and its salts.
- 8. (Currently amended) The compound (9S)-2,3-Dimethyl-9-(2-methylphenyl)-7H-8,9-dihydro-pyrano[2,3-c]-imidazo[1,2-a]pyridine-6-carboxylic acid dimethylamide or a salt thereof and its-salts.
- 9. (Currently amended) The compound (9S)-9-(4-Fluorophenyl)-2,3-dimethyl-7H-8,9-dihydro-pyrano[2,3-c]-imidazo[1,2-a]pyridine-6-carboxylic acid dimethylamide or a salt thereof and its salts.
- 10. (Currently amended) A process for the synthesis of a compound of the formula 1 as claimed in claim 1, which comprises converting a compound of the formula 8, in which R1, R3 and Arom have the meanings as indicated in claim 1,

to a racemic mixture of a compound of the formula 1 as claimed in claim 1 and its optical antipode of the formula 2, wherein R1, R2, R3 and Arom have the meanings as indicated in claim 1,

and

- separation of separating the compound of the formula 1 from its optical antipode of the formula 2 and
- if desired, further derivatization of optionally, further derivatizing the compound of the formula 1 either on the stage of the when said compound is a racemic mixture of the compound of the formula 1 and its optical antipode of the formula 2, or after separation of the compound of the formula 1 from its optical antipode of the formula 2.

- 11. (Currently amended) A process for the synthesis of a compound of the formula 1 as claimed in claim 1, which comprises
- an asymmetric reduction of asymmetrically reducing a compound of the formula 4 to a compound of the formula 17

in which

- R1, R2, R3 and Arom have the meanings as indicated in claim 1,
  - and <del>conversion of</del> <u>converting</u> a compound of the formula 17 into a compound of the formula 1 or <u>a salt</u> thereof <u>its salts</u>.
- 12. (Currently amended) A process for the synthesis of a compound of the formula 1 as claimed in claim 1, which comprises
- conversion of converting a compound of the formula 14 to a compound of the formula 17,

in which

R1, R2, R3 and Arom have the meanings as indicated in claim 1,

- and conversion of converting a compound of the formula 17 into a compound of the formula 1 or a salt thereof its salts.

- 13. (Currently amended) A process for the synthesis of a compound of the formula 1 as claimed in claim 1, which comprises
  - converting a compound of the formula 13, in which R1, R2 and R3 have the meanings as indicated in claim 1, into a compound of the formula 14, in which R1, R2, R3 and Arom have the meanings as indicated in claim 1,

- and further conversion of converting the compound of the formula 14 into a racemic mixture of a compound of the formula 1 and its optical antipode of the formula 2

and

- separation of separating the compound of the formula 1 from its optical antipode of the formula 2 and
- if desired, further derivatization of optionally, further derivatizing the compound of the formula 1 either on the stage of the when said compound is a racemic mixture of the compound of the formula 1 and its optical antipode of the formula 2, or after separation of the compound of the formula 1 from its optical antipode of the formula 2.
- 14. (Currently amended) A medicament pharmaceutical composition comprising a compound as claimed in claim 1 and/or a pharmacologically acceptable salt thereof together with a pharmaceutically acceptable auxiliary and/or excipent customary pharmaceutical auxiliaries and/or excipients.

15. (Currently amended) A medicament pharmaceutical composition comprising a compound as claimed in claim 1 and/or a pharmacologically acceptable salt thereof together with a pharmaceutically acceptable auxiliary and/or excipent customary pharmaceutical auxiliaries and/or excipents being substantially free of a compound of the formula 2

in which R1, R2, R3 and Arom have the meanings as indicated in claim 1.

16. (Currently amended) The use of A method of preventing or treating a gastrointestinal disorder in a patient comprising administering to a patient in need thereof a compound as claimed in claim 1 or a and its pharmacologically acceptable salt thereof salts for the prevention and treatment of gastrointestinal disorders.